

MI Flu Focus

Influenza Surveillance Updates Bureaus of Epidemiology and Laboratories



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MI's Current Influenza Activity Level:

Sporadic

Updates of Interest:

As of October 21, 84 of 125 individuals in MI tested for EV-D68 by CDC were positive (67.2%); 3 of the 84 confirmed cases had neurologic symptoms.

Influenza Surveillance Report for the Week Ending October 11, 2014

Michigan Disease Surveillance System

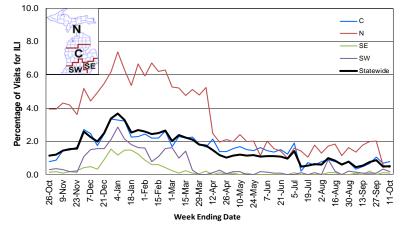
MDSS influenza data indicated that compared to levels from the previous week, aggregate reports decreased while individual reports remained the same and are still at sporadic levels. Aggregate reports are lower than and individual reports are higher than levels seen during the same time period last year.

Emergency Department Surveillance

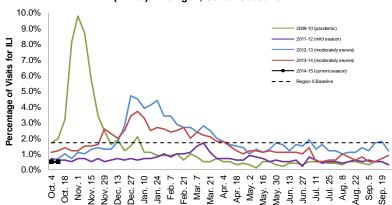
Compared to levels from the week prior, emergency department visits from constitutional complaints were similar, while emergency department visits due to respiratory complaints decreased compared to the prior week. Constitutional and respiratory complaints were higher than levels reported during the same time period last year.

- 7 constitutional alerts (3SW, 4C)
- 10 respiratory alerts (5SW, 4C, 1N)

Percentage of Visits for Influenza-like Illness (ILI) Reported by Sentinel Providers, Statewide and Regions 2014-15 Flu Season



Percentage of Visits for Influenza-like Illness (ILI) Reported by the US Outpatient Influenza-like Illness Surveillance Network (ILINet): Michigan, Select Seasons



Sentinel Provider Surveillance

The proportion of visits due to influenza-like illness (ILI) remained the same at 0.5% overall; this is below the regional baseline (1.7%). A total of 43 patient visits due to ILI were reported out of 8,315 office visits. Please note: These rates may change as additional reports are received.

Number of Reports by Region (27 total):

- C (14)
- N (3)
- SE (7)
- SW (3)

Become a Sentinel Provider!

As part of pandemic influenza surveillance, CDC and MDCH highly encourage year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Stefanie DeVita at devitas1@michigan.gov for more information.

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Hospital Surveillance

The CDC Influenza Hospitalization Surveillance Project provides population-based rates of severe influenza illness through active surveillance and chart review of lab-confirmed cases, starting on October 1, 2014, for Clinton, Eaton, Genesee, and Ingham counties. One influenza-related hospitalization was reported.

The MDCH Influenza Sentinel Hospital Network monitors influenza hospitalizations reported voluntarily by hospitals statewide. Two hospitals (SW, C) reported. Results are listed in the table below. If hospitals have not received their influenza hospitalization tally sheets for 2014-2015, please contact Susan Bohm at bohms@michigan.gov.

Age Group	New Flu Hospitalizations Reported	Total 2014-15 Flu Hospitalizations to Date
0-4 years	0	0
5-17 years	1 (C)	1 (C)
18-49 years	0	0
50-64 years	0	0
65 years & older	0	2 (SE)
Total	1 (C)	3 (2SE, 1C)

Laboratory Surveillance

MDCH Bureau of Laboratories reported 3 positive influenza results: 1 pH1N1, 1 A/H3, and 1 influenza B. Influenza results for the 2014-15 season (i.e. those collected since September 28, 2014) are reported in the table below.

Respiratory Virus	# Positive Respiratory Virus rus Results by Region		Total	# Specimens Antigenically Characterized	# Tested for Antiviral Resistance		
	С	Ν	SE	SW	Characterized	# Resistant / Total # Tested	
2009 A/H1N1pdm				1	1		
Influenza A/H3			1		1		
Influenza B			1		1		

In addition, 8 sentinel labs (3SE,2SW,2C,1N) reported influenza results. Two labs (SW,C) reported sporadic influenza A activity. Two labs (SE,SW) reported influenza B activity. One lab (SE) reported sporadic Parainfluenza activity. One lab (N) reported sporadic RSV activity. One lab (SE) reported sporadic Adenovirus activity. No labs reported hMPV activity. Most testing volumes are at low levels, with a few sites in the moderate-to-high range.

Influenza-associated Pediatric Mortality

No pediatric influenza-associated influenza mortalities have been reported to MDCH for the 2014-15 season.

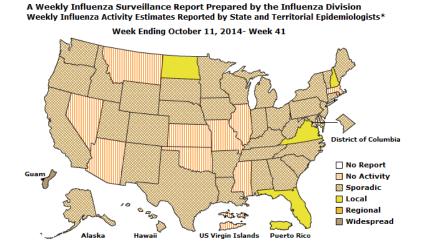
Influenza Congregate Settings Outbreaks

No respiratory facility outbreaks have been reported to MDCH for the 2014-15 season.

National: Influenza activity was low in the United States, with 1.3% of outpatient visits due to influenza-like illness. Additional information is available from the weekly FluView reports available online at: www.cdc.gov/flu/weekly/.

International: Globally, influenza activity remained low, with the exception of some tropical countries in the Americas and some Pacific Islands. Summary information is available online at

www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/.



FluBytes



INFLUENZA ACTIVITY THROUGHOUT THE U.S.

- Drive-through flu shot clinic in Genesee County
- Delaware confirms first flu of the season

INFLUENZA-RELATED JOURNAL ARTICLES

- AJIC: <u>Detection of hospital outbreaks of influenza-like illness based on excess of incidence rates compared to the community</u>
- Modelling the epidemic spread of an H1N1 outbreak in a rural university town
- JAMA: Immunogenicity of avian influenza <u>A/Anhui/01/2005(H5N1) vaccine with MF59</u> adjuvant
 - In participants who had not previously received H5 vaccine, low-dose vaccine plus adjuvant more immunogenic compared with higher doses of unadjuvanted vaccine

MDCH FALL REGIONAL IMMUNIZATION CONFERENCES

Register <u>now</u> for the MDCH fall immunization conferences! The Grand Rapids conference is now full. The following conferences still have spots open:

- Oct. 24: Troy - Nov. 21: East Lansing

- Nov. 19: Kalamazoo

CDC 'YOU CALL THE SHOTS' FLU MODULE

CDC recently updated the influenza vaccine module in the web-based training course 'You Call the Shots.' Continuing education credit is available for watching the module and completing the evaluation. You can view the module https://example.com/here/based-shots/

FLU WEBSITES

www.michigan.gov/flu www.cdc.gov/flu www.flu.gov http://vaccine.healthmap.org/

AVIAN INFLUENZA A(H7N9)

- China reports two cases of human infection of avian influenza A(H7N9) in mainland
 - o 44-year-old woman, fatal case, Xinjiang
 - o 7-year-old girl, Beijing
- <u>Taiwan raises travel alert for Beijing, Xinjiang</u> on H7N9 reports
- JAMA: Serological responses to an avian influenza A/H7N9 vaccine mixed at the pointof-use with MF59 adjuvant – A Randomized Clinical Trial
 - Point-of-use mixing and administration of 2 doses of vaccine at the lowest tested antigen dose with MF59 produced seroconversion in 59% of participants

OTHER INFLUENZA-RELATED NEWS

- Oral influenza vaccine one step closer, says
 Vaxart
- Santa Barbara County mandates influenza vaccinations for healthcare workers
- Olmsted Medical Center and Mayo Clinic team up to provide flu vaccines in schools
- bioCSL Inc. completes 2014-15 flu season shipment of Afluria®
- Middle-aged adults were more susceptible to the flu last year because of a new viral mutation, say Wistar scientists
- CDC Seasonal Flu Doses Distributed: ~112.3 million doses distributed in U.S. (week of October 10, 2014)
 - "Some companies have communicated information to their customers about delays in shipments that had originally been anticipated for August and September. Despite these early season shipping delays, however, manufacturers anticipate the majority of their flu vaccine distribution will occur by the end of October."

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For questions or to be added to the distribution list, please contact Stefanie DeVita at <u>devitas1@michigan.gov</u>.

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